REMARKS

By this amendment, Claims 1, 4, and 9 have been amended, Claims 2 and 11-20 have been cancelled, and no claims have been added. Hence, Claims 1 and 3-10 are pending in the application.

RESPONSE TO CLAIM OBJECTIONS

Claim 9 was objected to because "'level' should be replaced by 'class' for consistency." Claim 9 has been amended herein in accordance with the suggestion of the Office Action. Consequently, it is respectfully submitted that the objection to Claim 9 has been overcome.

Claims 11-20 have been objected to under 37 CFR § 1.75(c) for allegedly being recited in an improper dependent form. Claims 11-20 have been cancelled herein. Consequently, it is respectfully submitted that the objections to Claims 11-20 have been rendered moot.

ALL PENDING CLAIMS ARE DIRECTED TOWARDS STATUTORY SUBJECT MATTER

Claims 1-10 were rejected under 35 U.S.C. § 101 for allegedly not being "within the technological arts" because Claim 1 does not expressly recite steps that are carried out by a computer. The Applicants respectfully submit that the Office Action does not cite any authority for such a position. As a practical matter, the United States Patent Office has been granting patents long before the invention and use of what is typically referred to as a computer. Further, the Applicants note that 35 U.S.C. § 101 does not contain any such limitation. As both a machine and a process are both expressly recited in the list of statutory

matter in 35 U.S.C. § 101, statutory interpretation supports the conclusion that a process covers at least some statutory subject matter that is not covered by a machine, otherwise there would be no need to expressly list a process. Indeed, in *Diamond v. Chakrabarty* (1980), the U.S. Supreme Court uttered the now-famous words that patentable subject matter is "anything under the sun that is made by man." For example, the United States Patent Office has issued patents that include method claims directed towards a "Method for Testing the Freshness of Fish" (U.S. Patent No. 4,980,294, issued Dec. 25, 1990), a "Method and Apparatus for Applying Advertisements to Eggs" (U.S. Patent No. 4,843,958, issued July 4, 1989), and a "Method for Cleaning Pierced Earlobes" (U.S. Patent No. 5,183,461, issued Feb. 2, 1993).

Without acquiescing to the position taken by the Office Action, the Applicants have amended Claim 1 to clarify that the steps featured in Claim 1 are performed by a machine-executed operation involving instructions, where the machine-execution operation is one of: (a) sending instructions over transmission media, (b) receiving instructions over transmission media, (c) storing instructions onto a machine-readable storage medium, or (d) executing instructions. Therefore, the recited steps cannot be satisfied solely by human activity, as the recited steps are drawn to a machine-executed operation. Consequently, it is respectfully submitted that the rejection made under 35 U.S.C. § 101 raised by the Office Action has been overcome.

THE PENDING CLAIMS ARE PATENTABLE OVER THE CITED ART

Claims 1, 4-7, 9, and 10 are rejected under 35 U.S.C. § 102(b) for allegedly being anticipated by U.S. Patent Application No. 2002/0128904 issued to Carruthers et al. ("*Carruthers*").

Claims 2, 3, 4, 8, and 10 are rejected under 35 U.S.C. § 103(a) for allegedly being obvious in view of *Carruthers*.

Applicants amend Claim 1 to recite subject matter previously featured in Claim 2 and traverse.

Each pending claim features one or more elements that are not disclosed, taught, or suggested by *Carruthers*.

CLAIM 1

Claim 1 recites,

> A method for determining which advertisements to include with electronic content delivered to users over a network, wherein the method comprises performing a machine-executed operation involving instructions, wherein the machine-executed operation is at least one of:
> A) sending said instructions over transmission media;
> B) receiving said instructions over transmission media;
> C) storing said instructions onto a machine-readable storage medium; and
> D) executing the instructions;
> wherein said instructions are instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:
> storing sequence information that indicates a sequence for a plurality of advertisements, wherein each of said plurality of advertisements is associated with corresponding delivery criteria;
> receiving a request to provide over said network a piece of electronic content that includes a slot for an advertisement;
> comparing slot attributes of said slot with delivery criteria of said advertisements to determine a subset of said plurality of advertisements which qualify for inclusion in said slot; and
> **from said subset of advertisements, selecting an advertisement to include in the slot based, at least in part, on relative positions, within said sequence, of the advertisements in said subset,**
> **wherein each advertisement of said plurality of advertisements has a corresponding delivery obligation, and**
> **wherein the relative position of advertisements in said sequence corresponds to when the corresponding delivery obligation was incurred.** (emphasis added)

At least the above-bolded elements of Claim 1 are not disclosed, taught, or suggested by *Carruthers*.

Applicants concede that at a high level, both the pending claims and *Carruthers* are directed towards placing advertisements in requested content. It is also acknowledged that the axiom of "know thy audience" was well recognized by advertisers, who were more likely to advertise beer during a football game than during a Saturday morning cartoon, and likewise were more likely to advertise a children's toy during a Saturday morning cartoon than during a football game. However, beyond these sparse generalities, there is little in common between the pending claims and the approach of *Carruthers*.

The approach of Claim 1

The approach of Claim 1 is directed towards the process of selecting which advertisements to include in content. The approach of Claim 1 features numerous advantages over prior approaches. For example, as explained in the Applicants' specification (See pages 1-6), a prior approach, entitled the most-behind-first approach, for selecting which advertisements to include in content may lead to perceived or actual unfairness since an advertiser could contract for a higher delivery obligation than the advertiser actually desires. In such a case, an advertiser who contracts for a higher delivery obligation than the advertiser actually desires may cause advertisements of advertisers who contracted earlier, but with more realistic delivery obligations, to cease to be selected for inclusion within content.

Advantageously, the approach of Claim 1 overcomes this disadvantage, as well as other disadvantages, by storing sequence information that indicates a sequence for a plurality of advertisements. For example, the sequence may reflect the relative times at which the provider incurred the delivery obligations associated with the advertisements. After the

sequence has been established, the position of advertisements within the sequence is used as one of the factors for determining which advertisement to place in a slot, where advertisements nearer the beginning of the sequence (advertisements with earlier-incurred delivery obligations) are favored over advertisements that are nearer the end of the sequence (advertisements with later-incurred delivery obligations).

What *Carruthers* teaches

Carruther teaches a system where a centralized Inventory Manager 54 generates a master list of scheduled advertisements based on calculated goals of each active advertising campaign (paragraph 34). A Delivery Manager 54 may reorder or reprioritize the master list of scheduled advertisements based on whether daily goals are met (paragraph 35). The Delivery Manager 54 delivers the master list of scheduled advertisements, and the advertisements themselves, to an On-Demand Scheduler 70 residing at each ISP POP server (paragraphs 34-37). The On-Demand Scheduler 70 determines which advertisements a subscriber is eligible to receive and delivers advertisements in accordance with the master list of scheduled advertisements generated by the Delivery Manager 54 (paragraph 39).

Carruthers discloses that the order in which advertisements should be sent to subscribers should be "based preferably both upon priority and some weighting mechanism that indicates how many impressions are needed by each campaign (paragraph 34, lines 8-10). Importantly, *Carruthers* makes clear that the order in which advertisements are to be displayed is not based on when a delivery obligation was incurred. In sharp contrast, the prioritized master list of scheduled advertisements is based on the calculated goals of each of the active advertising campaigns (see paragraph 34). After the Inventory Manager of *Carruthers* generates the prioritized master list of scheduled advertisements based on the

goals of each of the active advertising campaigns, the prioritized master list may be reordered based upon whether daily goals are met. For example, paragraph 35 of *Carruthers* states:

> The Delivery Manager 54 can reorder or reprioritize the master list of scheduled advertisements based upon delivery feedback data and queuing logic/algorithms. For example, if the goal for a given campaign is to evenly distribute an advertisement over the course of the campaign length, the advertisements can be moved down in the queue of advertisements to be displayed if it gets ahead of its daily goals. Similarly, if an advertisement gets behind in meeting its goals, it may be automatically promoted in priority. If an advertisement exceeds its daily goals it can be effectively shut off by being placed at the very end of the queue. (emphasis added)

Thus, if a particular advertisement is behind in its daily goals, it will be promoted in priority (see paragraph 54, quoted above). Such an approach suffers from the same disadvantages discussed in Applicants' background. For example, paragraphs 15-16 of the Applicants' background state:

> One way of using a behindness measure to select the advertisements that are competing for a slot involves always selecting the qualifying advertisement with the highest behindness value. By selecting the qualifying advertisement with the highest behindness value, the provider ensures that approximately the same percentage of every order is satisfied during a shortfall situation.
>
> Unfortunately, the most-behind-first approach has some significant disadvantages that may lead to perceived or actual unfairness. For example, an advertiser may be interested in advertising in slots that are already subject to several pre-existing obligations. If the advertiser becomes aware of the pre-exiting obligations, the advertiser may contract for a much higher delivery obligation than the advertiser actually desires. The consequences of such a contract could be to significantly reduce the number of slots assigned to the previously contracted advertisers, while potentially given the latecomer advertiser exactly the number of slots the advertiser actually desires.

Thus, under the approach of *Carruthers*, a first advertiser could contract for a number of advertisements to be shown. At some later point in time, a second advertiser could contract for a much larger number of advertisements than the second advertiser actually desires. As *Carruthers* promotes advertisements in priority if they are behind their daily

goals, it is possible that the second advertiser will receive exactly the number of slots the second advertiser actually desires, but the first advertiser will receive a much smaller portion of slots than the first advertisers contracted for, even though the first advertiser contracted before the second advertiser. As a result, the first advertiser may perceive such an arrangement to be unfair.

Several Elements of Claim 1 are not Taught or Suggested by *Carruthers*

Claim 1 features the elements of:

> "from said subset of advertisements, selecting an advertisement to include in the slot based, at least in part, on relative positions, within said sequence, of the advertisements in said subset,
> wherein each advertisement of said plurality of advertisements has a corresponding delivery obligation, and
> wherein the relative position of advertisements in said sequence corresponds to when the corresponding delivery obligation was incurred"

The portion of *Carruthers* cited by the Office Action to show the above elements (paragraphs 34-35) is discussed above. This portion of *Carruthers* merely teaches the same approach as discussed in the Applicants' background. Specifically, *Carruthers* teaches that the order in which advertisements are shown is initially based on the calculated goals of each active advertising campaign (paragraph 34), and "if an advertisement gets behind in meeting its [daily] goals, it may be automatically promoted in priority" (paragraph 35). As explained above, such an approach may result in perceived unfairness by advertisers having advertisements whose delivery is adversely affected by the conduct of subsequent advertisers.

On the other hand, the above-quoted features of Claim 1 require selecting an advertisement to include in a slot based, at least in part, on the relative position of the advertisement, within in a sequence of advertisements, that corresponds to when the

corresponding delivery obligation for the advertisements were incurred. In sharp contrast, *Carruthers* lacks any teaching or suggestion of selecting advertisements to include in a slot based, at least in part, on a sequence that corresponds to when the corresponding delivery obligations of the advertisements were incurred.

Indeed, as explained above, *Carruthers* teaches away from this feature by teaching that the order in which advertisements are shown is initially based on the goals of active advertising campaigns, and that order may be subsequently revised based on the daily goals for each active advertising campaign. The daily goals of *Carruthers* are based not on when a delivery obligation was incurred, but how many times an advertisement was shown that day compared to the contracted number of advertisements. Thus, at no time are advertisements selected for inclusion in a slot based on when a delivery obligation was incurred in the approach of *Carruthers*.

Consequently, the above-quoted elements are not disclosed, taught, or suggested by *Carruthers*. As at least one element of Claim 1 is not disclosed, taught, or suggested by *Carruthers*, Claim 1 is patentable over the cited art and is in condition for allowance.

Response to Office Action's Comment Regarding Effectiveness of the Approach of Pending Claims

The Office Action states:

> it is pointed out that applicant states the invention is designed to eliminate the problem of an advertiser inflating the number of requested ad impressions in order to get their ads shown more often in a system that delivers ads for campaigns which are not on-track. However, applicant's system does not eliminate this problem. Any advertiser in applicant's system that inflates the actual number of impressions desired will prevent advertisers behind them in line from getting their ads shown. The first advertiser to inflate their requests will get all of their ads shown. This system merely lets those at the front of

> the line dictate how much is left for others behind them in line – much like the well known "first come, first served" approach.

Applicants make two observations regarding the above passage. The first observation is that the above passage mischaracterizes the problem that the pending claims solve. An advertiser is always free to contract for the delivery of as many advertisements as he or she wishes (and hopefully is capable of paying for). An entity contracting with advertisers (a "advertisement deliverer") for the delivery of advertisements would typically be happy to contract for as many advertisements as they may delivery to maximize their profit. Thus, the problem that the pending claims address is not whether an advertiser may contract for a higher delivery obligation than the advertiser would like to actually have delivered, but whether an advertiser may contract for a delivery obligation that causes advertisements of advertisers who contracted earlier, but with more realistic delivery obligations, to cease to be selected for inclusion within content delivered by the advertisement deliverer.

According to the approach of the pending claims, if an advertiser contracts for a higher number of advertisements than they actually desire, then (a) that advertiser is still liable for the contracted number of advertisements, and (b) all subsequent advertisers can be made aware of the availability of the advertisement deliverer, thereby allowing them to contract, if they so choose, for an amount of advertisements which the advertisement deliverer can actually deliver. However, a subsequent advertiser, who contracted with the advertisement deliverer at a later point in time, cannot adversely affect the delivery of advertisements of an earlier advertiser who entered into a contractual obligation with the advertisement delivery at an earlier point in time.

The second observation is that the above passage mischaracterizes the approach of Claim 1 as merely an implementation of the "first come, first serve" approach. Claim 1

recites the feature of "selecting an advertisement to include in the slot ***based, at least in part, on*** relative positions, within said sequence, of the advertisements in said subset." Thus, while the relative position of advertisements in the subset of advertisements that qualify for inclusion within a slot is a factor of which advertisement is selected, the relative position is not determinative. For example, paragraph 23 of the Applicants' specification teaches:

> After the schedule sequence has been established, the position of competing advertisements within the schedule sequence is used as one of the factors for determining which competing ad to place in a slot, where ads nearer the beginning of the sequence (ads with earlier-incurred delivery obligations) are favored over ads that are nearer the end of the sequence (ads with later-incurred delivery obligations). For example, if all other factors are equal, the selection mechanism would select ad X over ad Y due to the fact that ad X is positioned ahead of ad Y in the schedule sequence.

CLAIMS 3-10

Claims 3-10 are dependent claims, each of which depends (directly or indirectly) on Claim 1. Each of Claims 3-10 is therefore allowable for the reasons given above for the claim on which it depends. In addition, each of Claims 3-10 introduces one or more additional limitations that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

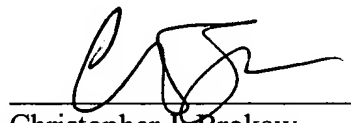
CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any fee shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,
HICKMAN PALERMO TRUONG & BECKER LLP

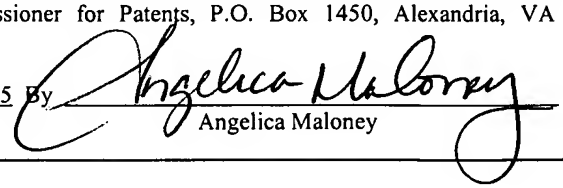


Christopher J. Brokaw
Reg. No. 45,620
Date: September 15, 2005

2055 Gateway Place, Suite 550
San Jose, CA 95110-1089
(408) 414-1080, ext. 225
Facsimile: (408) 414-1076

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: **Mail Stop Amendment**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

On September 15, 2005 By 
Angelica Maloney